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upstream synchronization distribution unit coupled to the active input port of a downstream synchronization distribution unit and the active output port of an upstream synchronization distribution unit coupled to the passive input port of a downstream synchronization distribution unit, each synchronization distribution unit performing clock recovery on the synchronization signal received at its active input port.

REMARKS

In the Office Action, the Examiner noted that claims 1-21 are pending in the application, that claims 9-15 and 18-21 are objected to, and that claims 1-8, 16 and 17 stand rejected. By this response, claims 1 and 16 are amended to more clearly define the Applicant's invention and not in response to prior art. All other claims are un-amended by this response.

In view of the amendments presented above and the following discussion, the Applicant respectfully submits that none of these claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. § 103. Thus the Applicant believes that all of these claims are now in allowable form.

Objections

The Examiner objected to claims 9-15 and 18-21 as being dependent upon a rejected base claim but stated that the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Applicant would like to thank the Examiner for pointing out allowable subject matter, but the Applicant respectfully submits that in view of the amendments presented above and the following discussion, none of the base claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. § 103. As such and for at least the reasons set forth herein, the Applicant also submits that the claims dependent upon the base claims are also not anticipated under the

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provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. § 103 and are patentable thereunder.

Rejections

A. 35 U.S.C. § 102

The Examiner rejected claims 1-3 under 35 U.S.C. § 102(e) as being anticipated by Cheong et al. (U.S. Patent No. 6,477,154, hereinafter "Cheong"). The rejection is respectfully traversed.

The Examiner alleges that regarding claim 1, referring to figure 2, Cheong discloses an apparatus for providing synchronization signals to a telecommunications network comprising: a central synchronization management unit (i.e., micro base station controller mBSC, Fig. 2) for distributing synchronization signals (i.e., the reference clock signals, for example 10Mhz, generated from the GPS receiver 212 212 of mBSC, Fig. 2), and a synchronization distribution unit (i.e., optical splitter or optical node 214, FIG. 1) connected to receive synchronization signals from the central synchronization management unit and to distribute the signals to at least one network element (i.e., micro base station mBS 216, 221, and 225, FIG. 2) (col. 5, lines 19-67, col. 6, lines 1-27 and lines 54-67 and col. 7, lines 1-24). The Applicant respectfully disagrees.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1983)) (emphasis added).

The Applicant submits that the Cheong reference fails to teach, suggest or disclose each and every element of at least the invention as recited in the Applicant's amended claim 1, which specifically recites:

"An apparatus for providing synchronization signals to a telecommunications network comprising:
a central synchronization management unit for distributing synchronization signals; and

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a synchronization distribution unit connected to receive synchronization signals from the central synchronization management unit and to distribute the signals to at least one network element, said synchronization distribution unit including a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit." (emphasis added).

The Applicant's invention is directed, at least in part, to various embodiments of synchronization systems, wherein synchronization and management signals are carried over links between a single central synchronization management unit and each synchronization distribution unit, and between each synchronization distribution unit and each network element, wherein each synchronization distribution unit only receives synchronization signals from the single central synchronizing management unit and the received synchronization signals are recovered in each of the synchronization distribution units. In support of the Applicant's invention, at least with regard to claim 1 recited above, the Applicant in the Specification, specifically recites:

"The distributed architecture of the present invention, an architecture that distributes synchronization and management signals to synchronization distribution units which, in turn, distribute signals to network elements, reduces the number of links required for the distribution of these signals. That is, each synchronization distribution unit acts as a concentrator, preferably communicating with a plurality of network elements and thereby limiting the number of direct links to a central synchronization management unit." (See Applicant's Specification, page 6, lines 23-29).

and

"In operation primary and secondary timing signals are received along the primary and secondary optical paths 404 and 406 which, together with the optical beam splitter 402, form the passive optical link. Both signals are split and a portion of the signals proceed along the paths 404 and 406 while another portion is routed along paths 414 and 416 to the circuit 408. The circuit 408 selects among the four input optical signals, i.e., the primary and secondary signals from paths 404 and 406 and the primary and secondary signals from paths 410 and 412, to pass along to a timing processor and synchronizer 418. The timing processor

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and synchronizer 418 operates to retime the signals, and passes the retimed signals to electronic output drivers 420 which convert the optical signals to electronic signals for distribution to network elements served by the synchronization distribution unit 400." (See Applicant's Specification, page 14, lines 8-18).

It is clear from the Applicant's disclosure that the Applicant's invention is directed, at least in part, to a distributed architecture limiting the number of direct links to a central synchronization management unit by distributing synchronization signals to at least one synchronization distribution unit which recovers the timing of the synchronization signals from the central synchronization management unit and in turn distributes the recovered synchronization signals to connected network elements.

There is absolutely no teaching, suggestion or disclosure in Cheong for a synchronization distribution unit having "a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" where the synchronization distribution unit is configured "to distribute the signals to at least one network element" as claimed in at least the Applicant's claim 1. In this Office Action, the Examiner alleges that in Cheong, the optical splitter or optical node 214 of Fig. 1 teaches the synchronization distribution unit of the Applicant's invention. However, the Applicant would like to respectfully point out to the Examiner that the optical splitter or optical node 214 of Fig. 1 of Cheong fails to teach, suggest or disclose at least a synchronization distribution unit having "a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" as taught in the Applicant's Specification and claimed in at least the Applicant's claim 1.

That is, in contrast to the Applicant's invention, the invention of Cheong teaches and is directed to a microcellular mobile communication system which performs various functions such as a centralized management of resources. (See Cheong, Abstract). However, in contrast to the Applicant's invention, Cheong discloses:

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"Referring to FIG. 2, the optical node or optical splitter 214 may be interfaced with HFC network. Where the reference numeral 214 refers to an optical splitter, the reference numeral 215 refers to a structure of star-shaped optical fiber network, and where the reference numeral 214 refers to optical node, the reference numeral 215 refers to a structure of coaxial network. Consequently, the micro base station 216 up-converts a message conveyed on the cable frequency transmitted from the XCVB 207, into the RF, and transmits the up-converted message to a mobile station." (See Cheong, col. 5, lines 28-37).

and

"The microcellular mobile communication system in the accordance with present invention as described above may be connected with the Wireless Local Loop (WLL) service module 217 for providing a WLL service, and the service module 222 for providing the third generation mobile communication service. That is, the WLL service module 217 up-converts the RF into the cable frequency appropriate to a service and then provides the channel frequency combiner 211 of the present invention with the signals converted by the additional IF converter 218, or converts electrical signals into optical signals using the additional electrical-to-optical converter 219, and then provides the optical splitter or optical node 214 with the converted signals through the optical wavelength coupler (not shown) included in the path 220. Similarly, the third generation mobile communication service module 222 up-converts the RF into the cable frequency appropriate to a service and then provides the channel frequency combiner 211 of the present invention with the signals converted by the additional IF converter 223, or provides the optical wavelength coupler of the path 220 with the RF through the additional electrical-to-optical converter 224. The optical splitter or optical node 214 is connected to the mBSs 221 and 225 for providing these services." (See Cheong, col. 5, line 60, through col. 6, line 16).

and

"Where both the reference numeral 214 in FIG. 2 and the reference numeral 413 in FIG. 6 are optical nodes, the relation between the MBSC and the optical node, may be applicable to the concept as described above. In other words the optical node and the mBS may be connected with different or same coaxial cables. Here where the same coaxial cables are used, the cable frequency shall be allocated differently from each other in the forward and reverse. In particular, each mBS may take remotely the power supply through coaxial cables connected to the optical node." (See Cheong, col. 9, lines 22-32).

It is clearly evident from a least the portions of the disclosure of Cheong presented above, that the optical splitter or optical node of Cheong, which the

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Examiner equates to the synchronization distribution unit of the Applicant's invention, is merely implemented to transmitted received signals from the optical splitter or optical node 214 to each mBS. There is absolutely no teaching, suggestion or disclosure in Cheong for a synchronization distribution unit having "a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" where the synchronization distribution unit is configured "to distribute the signals to at least one network element" as taught in the Applicant's Specification and claimed in at least the Applicant's claim 1.

Furthermore, the Applicant respectfully submits that Cheong fails to teach the distribution of synchronization signals by the central synchronization management unit as taught in the Applicant's Specification and claimed in at least claim 1. That is, in support of the claimed invention, the Applicant in the Specification specifically recites:

"The central synchronization management unit 200 selects one of the clock sources 202 or 204 as a primary source and the other as a secondary source. Should the primary source fail, the central synchronization management unit switches to the secondary source to provide clock signals to the remainder of the system 201." (See Applicant's Specification, page 8 line 30 through page 9, line 4).

There is absolutely no teaching, suggestion or disclosure in Cheong for the distribution of synchronization signals by the central synchronization management unit as taught in the Applicant's Specification and claimed in at least the Applicant's claim 1.

As such and at least because the teachings of Cheong do not teach, suggest or disclose the distribution of the synchronization signals by the central synchronization management unit and do not teach, suggest or disclose a synchronization distribution unit having "a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" where the synchronization distribution unit is

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configured "to distribute the signals to at least one network element" as claimed in at least the Applicant's claim 1, the Applicant respectfully submits that the teachings and disclosure of Cheong do not anticipate the Applicant's invention, at least with respect to claim 1, where anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, the Applicant submits that claim 1 is not anticipated by the teachings of Cheong and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Furthermore, dependent claims 2-3 depend either directly or indirectly from independent claim 1 and recite additional features therefor. As such and for at least the reasons set forth herein, the Applicant submits that dependent claims 2-3 are also not anticipated by the teachings of Cheong. Therefore the Applicant submits that dependent claims 2-3 also fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the rejected claims individually subsequently in prosecution.

B. 35 U.S.C. § 103

The Examiner rejected claims 4 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Cheong in view of Moulton et al. (U.S. Patent 6,487,262, hereinafter "Moulton"). The rejection is respectfully traversed.

Claim 4 and Claim 16

Claim 16 is an independent claim reciting similar relevant features as independent claim 1. Claim 4 depends indirectly from the Applicant's independent claim 1 and recites additional limitations thereof. The Examiner applied Cheong to claims 4 and 16 as applied above for the rejection of claim 1. As argued above and for at least the reasons recited above, the Applicant submits that Cheong fails to teach suggest or make obvious the invention of the

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Applicant, at least with respect to claim 1. As such and at least because the teachings of Cheong do not teach, suggest or make obvious the Applicant's invention with respect to claim 1 as mentioned above, the Applicant respectfully submits that the teachings of Cheong also do not teach suggest or make obvious the Applicant's claims 4 and 16.

In addition, the Applicant respectfully submits that the teachings of Moulton alone, also do not teach, suggest or make obvious the invention of the Applicant, at least with respect to independent claims 1 and 16 and dependent claim 4. More specifically, Moulton teaches a method of network synchronization wherein data is transmitted from a broadband network unit to devices on a residence downstream carrier frequency. In Moulton, upstream data is transmitted on an upstream carrier frequency and the upstream data rate and the upstream carrier frequency are integer multiples of a sub-harmonic of a master clock. (See Moulton, Abstract). However, there is absolutely no teaching, suggestion or disclosure in Moulton for "a central synchronization management unit for distributing synchronization signals" and "a synchronization distribution unit connected to receive synchronization signals from the central synchronization management unit and to distribute the signals to at least one network element" where "said synchronization distribution unit including a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" as claimed in at least the Applicant's claim 1.

Even further, there is absolutely no teaching or suggestion in Moulton for the distribution of synchronization signals by the central synchronization management unit as taught in the Applicant's Specification and claimed in at least claim 1. More specifically, Moulton fails to teach, suggest or make obvious the distribution of synchronization signals by the central synchronization management unit as taught in the Applicant's Specification and claimed in at least the Applicant's claim 1. That is, Moulton fails to teach, suggest or make obvious selecting one of the clock sources as a primary source and the other as

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a secondary source as taught in the Applicant's Specification and claimed in at least the Applicant's claim 1.

As such and at least because the teachings of Moulton do not teach, suggest or make obvious the Applicant's invention with respect to claim 1 as mentioned above, the Applicant respectfully submits that the teachings of Moulton also do not teach suggest or make obvious the Applicant's claim 4.

In addition, Moulton fails to teach, suggest or make obvious a method of distributing synchronization signals including recovering a clock signal at a central synchronization management unit, and retiming the clock signal from the central synchronization management unit and distributing it over an optical link to a synchronization distribution unit, and recovering the clock signal from the central synchronization management unit at the synchronization distribution unit, and transmitting the clock signal from the synchronization distribution unit to a telecommunications network element as taught in the Applicant's Specification and claimed by at least the Applicant's claim 16.

Even further, the Applicant submits that there is absolutely no motivation or suggestion in either reference for the combination of Cheong and Moulton to attempt to teach the invention of the Applicant. More specifically, there is no motivation or suggestion in the invention of Cheong, for a microcellular mobile communication system where an optical splitter or optical node transmits received signals to each mBS, for combining the teachings of Moulton, for a system where upstream data is transmitted on an upstream carrier frequency and the upstream data rate and the upstream carrier frequency are integer multiples of a sub-harmonic of a master clock of the references, to attempt to teach the invention of the Applicant. Likewise, Moulton does not expressly or impliedly motivate or suggest such a combination.

For prior art reference to be combined to render obvious a subsequent invention under 35 U.S.C. § 103, there must be something in the prior art as a whole which suggests the desirability, and thus the obviousness, of making the combination. Uniroyal v. Rudkin-Wiley, 5 U.S.P.SQ.2d 1434, 1438 (Fed. Cir.

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1988). The teachings of the references can be combined only if there is some suggestion or incentive in the prior art to do so. In re Fine, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988). ***Hindsight is strictly forbidden. It is impermissible to use the claims as a framework to pick and choose among individual references to recreate the claimed invention*** Id. at 1600; W.L. Gore Associates, Inc., v. Garlock, Inc., 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983). (emphasis added)

Moreover, the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

The Applicant further submits that even if there was a motivation or suggestion to combine (which the Applicant maintains that there is not), the teachings of Cheong and Moulton, alone or in any allowable combination, fail to teach, suggest or make obvious the Applicant's invention, at least with regard to independent claim 1 and as such, with respect to claim 4, which depends from claim 1 and recites additional limitations therefor. That is, the teachings of Moulton fail to bridge the substantial gap between the Applicant's invention and the teachings of Cheong. More specifically, the teachings of Cheong and Moulton, alone or in any allowable combination, fail to teach, suggest or make obvious "a central synchronization management unit for distributing synchronization signals" and "a synchronization distribution unit connected to receive synchronization signals from the central synchronization management unit and to distribute the signals to at least one network element" where "said synchronization distribution unit including a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" as claimed in at least the Applicant's claim 1. That is, any allowable combination of Cheong and Moulton does not teach or

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suggest the distribution of synchronization signals from a central synchronization management unit to a synchronization distribution unit connected to receive synchronization signals from the central synchronization management unit, wherein the synchronization distribution unit distributes the synchronization signals to at least one network element and where the synchronization distribution unit includes a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit.

As such and for at least the reasons described above, the Applicant respectfully submits that neither the microcellular mobile communication system taught in Cheong or the synchronization and down-conversion in TDM/TDMA system taught in Moulton, alone or in any allowable combination, renders obvious the invention of the Applicant at least with respect to the Applicant's claim 1. As such and for at least the reason that Cheong and Moulton, alone or in any allowable combination, fail to teach or suggest the invention of the Applicant with regard to claim 1, the Applicant further submits that the teachings of Cheong and Moulton, alone or in any allowable combination, also fail to teach or suggest the invention of the Applicant with regard to claim 4, which depends from claim 1.

Furthermore, the Applicant submits that the teachings of Cheong and Moulton, alone or in any allowable combination, fail to teach, suggest or make obvious the Applicant's invention, at least with regard to independent claim 16. That is, the teachings of Moulton fail to bridge the substantial gap between the Applicant's invention and the teachings of Cheong. More specifically, the teachings of Cheong and Moulton, alone or in any allowable combination, fail to teach, suggest or make obvious a method of distributing synchronization signals including recovering a clock signal at a central synchronization management unit, and retiming the clock signal from the central synchronization management unit and distributing it over an optical link to a synchronization distribution unit, and recovering the clock signal from the central synchronization management unit at

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the synchronization distribution unit, and transmitting the clock signal from the synchronization distribution unit to a telecommunications network element as taught in the Applicant's Specification and claimed by at least the Applicant's claim 16. As such and for at least the reasons described above, the Applicant respectfully submits that neither the microcellular mobile communication system taught in Cheong or the synchronization and down-conversion in TDM/TDMA system taught in Moulton, alone or in any allowable combination, renders obvious the Applicant's claim 16.

Therefore, the Applicant submits that claims 4 and 16, as they now stand, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

C. 35 U.S.C. § 103

The Examiner rejected claims 5-8 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Cheong in view of Moulton, and further in view of Walter et al. (U.S. Patent 6,418,151, hereinafter "Walter"). The rejection is respectfully traversed.

Claims 5-8 depend indirectly from the Applicant's independent claim 1 and recite additional limitations thereof. Similarly, claim 17 depends directly from the Applicant's claim 16 and recites additional limitations thereof. The Examiner applied Moulton and Cheong to claims 5-8 and 17 as applied above for the rejections of claims 4 and 16. As argued above and for at least the reasons recited above, the Applicant submits that Moulton and Cheong fail to teach suggest or disclose the invention of the Applicant, at least with respect to claims 1 and 16. As such and at least because the teachings of Moulton and Cheong do not teach, suggest or disclose the Applicant's invention with respect to claims 1 and 16 as argued above, the Applicant respectfully submits that the teachings of Moulton and Cheong also do not teach suggest or disclose the Applicant's

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claims 5-8 and 17, which indirectly depend from the Applicant's claims 1 and 16 respectively.

In addition, the Applicant respectfully submits that the teachings of Walter alone, also do not teach, suggest or disclose the invention of the Applicant, at least with respect to independent claims 1 and 16 and dependent claims 5-8 and 17. More specifically, Walter teaches and is directed to the automatic switching between clock sources in synchronous networks by using Synchronous Status Message transmitted over the network and a control circuit positioned between the SASE and a network element. (See Walter, Abstract). Walter discloses:

“According to FIGS. 2 and 4 the clock generator PRC1, which functions as master, feeds the primary clock into the network, with all SDH network elements SDH Ne.sub.n being fed the network clock by this clock source PRC1. The signal path of the clock supply runs, starting at the clock source PRC1, via the priority-1-input of an SASE1 (Stand Alone Synchronization Equipment) and via T3 to the SDH network element SDH-Ne1. This latter feeds all STM-n outputs with this clock.” (See Walter, col. 2, lines 21-29).

In Walter, the network elements distribute the clock signals from one to another. This is in direct contrast to the Applicant's claimed invention wherein the Applicant claims and teaches “a synchronization distribution unit connected to receive synchronization signals from the central synchronization management unit and to distribute the signals to at least one network element.” Walter does not teach, suggest or disclose the synchronization unit of the Applicant's invention, wherein the synchronization unit receives synchronization signals and messages from the central synchronization management unit and distributes the signals and messages to each of the network elements as taught and claimed in the Applicant's invention.

In further contrast to the Applicant's invention, Walter teaches:

“If now, due to an interference with the operation, the clock source PRC1 drops out, the priority-1 signal of equipment SASE1 is absent as well. The

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priority-2 signal of equipment SASE1 is not extant at this time, because the network element SDH-NE2, as well as the network element SAH-NE4, transit the information SSM=DNU (Do Not Use for Timing). However the signal at T3 of the network element SDH-NE1 does not drop out, because the equipment SASE1 passes to the "holdover" state. Inasmuch as the network element SDH-NE1 cannot recognize from the T3 sine-signal which clock quality it has, the information SSM=G.812T is communicated to this network element SDH-NE1 via the SSM control line. Thereupon the network element SDH-NE1 enters this quality step into the SSM-byte of all STM-n signals, where n stands for 1, 2, 4, 16, 64 according to Recommendation ITU-T G.707. By this all network elements connected to the network element SDH-NE1 learn this change of the clock quality and can, in turn, react thereto. The network element SDH-NE3 disconnects thereupon the T4 clock output, since it receives this clock quality on the working route W as well as on the protection route PO.

The equipment SASE2 now switches over to the priority-2 clock input and sends further a clock of the quality step SSM=G.811 via T3 to the network element SDH-NE3. Via the control line SSM the clock quality SSM=G.811 is signaled further on. The network element SDH-NE3 issues on all outgoing STM-n signals the clock quality SSM=G.811. Thereupon all other network elements SDH-NE.sub.n become synchronized to the new clock issuer, i.e. to the network element SDH-NE3. The latter is now supplied with the replacement primary clock PRC2 by the clock source PRC2 via equipment SASE2. The network element SDH-NE2 now receives via the protection route P1, as well as also via the working route P2, clock signals of SSM=G.811 quality." (See Walter, col. 2, line 61 through col. 3, line 7).

In the invention of Walter, two clock signals are configured as a master and a slave and the clock signals originate and are distributed from alternate sources. If a clock signal from a first Stand Alone Synchronization Equipment fails, a clock signal from a second Stand Alone Synchronization Equipment is used as the synchronization signal for the network. These two different clock signals are distributed throughout the network from two different sources.

In contrast, the Applicant's invention teaches that all of the clock signals in a network are received and distributed by a central synchronization management unit of the Applicant's invention. There is absolutely no teaching in Walter for a central synchronization management unit as taught and claimed in the Applicant's invention. In fact, it would be impossible for the invention of Walter to

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perform the function of the Applicant's invention at least with respect to a central synchronization management unit for receiving various clock signals, choosing a first clock signal as a primary source and choosing a second clock signal as a secondary source. In support of the claimed invention, the Applicant discloses:

"The central synchronization management unit 200 selects one of the clock sources 202 or 204 as a primary source and the other as a secondary source. Should the primary source fail, the central synchronization management unit switches to the secondary source to provide clock signals to the remainder of the system 201." (See Applicant's Specification, page 8 line 30 through page 9, line 4).

In the Applicant's invention, there is no need to inform a second unit that a first unit's clock failed, such that upon a failure of a first clock, the second unit may distribute a second clock signal throughout the network as taught in claimed in Walter. Instead, in the Applicant's invention a single central synchronization management unit senses a failure in a primary clock and switches to a secondary clock.

Furthermore, the Applicant submits that there is absolutely no motivation or suggestion in either reference for the combination of Cheong, Moulton and Walter to attempt to teach the invention of the Applicant.

For prior art reference to be combined to render obvious a subsequent invention under 35 U.S.C. § 103, there must be something in the prior art as a whole which suggests the desirability, and thus the obviousness, of making the combination. Uniroyal v. Rudkin-Wiley, 5 U.S.P.SQ.2d 1434, 1438 (Fed. Cir. 1988). The teachings of the references can be combined only if there is some suggestion or incentive in the prior art to do so. In re Fine, 5 U.S.P.SQ.2d 1596, 1599 (Fed. Cir. 1988). ***Hindsight is strictly forbidden. It is impermissible to use the claims as a framework to pick and choose among individual references to recreate the claimed invention*** Id. at 1600; W.L. Gore Associates, Inc., v. Garlock, Inc., 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983). (emphasis added)

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Moreover, the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

The Applicant further submits that even if there was a motivation or suggestion to combine (which the Applicant maintains that there is not), the teachings of Cheong, Moulton and Walter, alone or in any allowable combination, fail to teach, suggest or make obvious the Applicant's invention, at least with regard to independent claims 1 and 16 and in addition, with respect to claims 5-8 and 17, which depend from claims 1 and 16 and recite additional limitations therefor. That is, the teachings of Walter fail to bridge the substantial gap between the Applicant's invention and the teachings of Cheong and Moulton. More specifically, the teachings of Cheong, Moulton and Walter, alone or in any allowable combination, fail to teach, suggest or make obvious "a central synchronization management unit for distributing synchronization signals" and "a synchronization distribution unit connected to receive synchronization signals from the central synchronization management unit and to distribute the signals to at least one network element" where "said synchronization distribution unit including a timing recovery system configured to perform timing recovery on the synchronization signals received from the central synchronization management unit" as claimed in at least the Applicant's claim 1. Furthermore, the Applicant submits that the teachings of Cheong, Moulton and Walter, alone or in any allowable combination, fail to teach, suggest or make obvious a method of distributing synchronization signals including recovering a clock signal at a central synchronization management unit, and retiming the clock signal from the central synchronization management unit and distributing it over an optical link to a synchronization distribution unit, and recovering the clock signal from the central synchronization management unit at the synchronization distribution unit,

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and transmitting the clock signal from the synchronization distribution unit to a telecommunications network element as taught in the Applicant's Specification and claimed by at least the Applicant's claim 16.

As such and for at least the reasons described above, the Applicant respectfully submits that Cheong, Moulton and Walter, alone or in any allowable combination, fail to teach or suggest the invention of the Applicant with regard to claims 1 and 16. As such and for at least the reason that Cheong, Moulton and Walter, alone or in any allowable combination, fail to teach or suggest the invention of the Applicant with regard to claims 1 and 16, the Applicant further submits that the teachings of Cheong, Moulton and Walter, alone or in any allowable combination, also fail to teach or suggest the invention of the Applicant with regard to claims 5-8 and 17, which depend either directly or indirectly from the Applicant's claims 1 and 16.

Therefore, the Applicant submits that claims 5-8 and 17, as they now stand, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

Applicant's Note

The Applicant would like to thank the Examiner for his suggestions regarding the allowability of claims 9-15 and 18-2121, but at this time the Applicant believes all of the claims in this application, as they now stand, to be allowable.

Conclusion

Thus the Applicant submits that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. § 103. Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both

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reconsideration of this application and its swift passage to issue are earnestly solicited.

If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, It is requested that the Examiner telephone Jorge Tony Villabon, Esq. or Eamon J. Wall, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,



Eamon J. Wall Attorney
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Dated: 6/23/04
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